YAMAHA

525 A-PMD Series

Digital Home Theater Speaker Systems

NEW PRODUCT BULLETIN

Designed for Natural Sound Reproduction in the Tradition of Fine-Quality Yamaha Speakers. Featuring Advanced PMD Cones with Aluminum Diecast Baskets, DC Diaphragm Tweeters and Innovative Cabinet Technology.

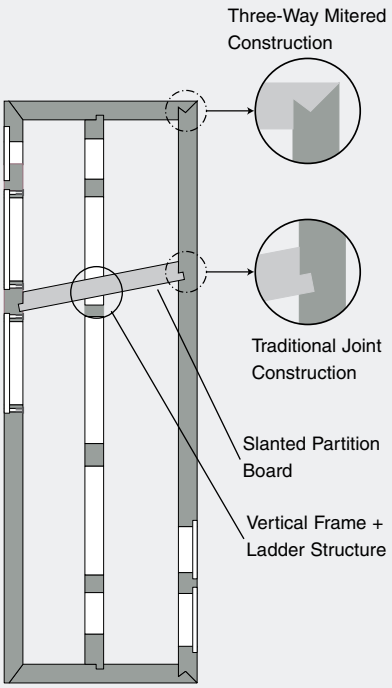
NS-525F
3-Way Bass-Reflex Tower Speaker System

NS-M525
2-Way Bass-Reflex Speaker System

NS-C525
2-Way Acoustic Suspension Center Speaker System

- Yamaha's Exclusive Advanced PMD Cone Woofers (NS-525F: Midrange also)
- Heavy-Duty Aluminum Diecast Baskets (NS-525F Woofer and Midrange)
- 1-1/8" Aluminum Dome Tweeters with DC-Diaphragm™ and New Frame
- New 3-Way Design Concept: Midrange and Woofer Have Same 6-1/2" Diameter (NS-525F)
- High-Performance Crossover Networks
- Innovative Two Separate Chambers with Vertical and Slanted Partitions (NS-525F)
- Three-Way Mitered Construction Cabinet with Chamfered Baffle
- Luxurious Real Wood Finish

Innovative Two Separate Chambers with Vertical and Slanted Partitions for Strong Structure Restricts Vibration (NS-525F)



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d-cinema Yamaha takes cinema digital

"d-cinema" is the slogan of Yamaha A/V products and technology, reflecting our focus on digital technology and our leadership in creating and refining digital home theater.

525 A-PMD Series Digital Home Theater Speaker Systems

Yamaha's Exclusive Advanced PMD Cone for Natural Sound Reproduction (Woofers and NS-525F Midrange Driver)

The Advanced PMD (Polymer-injected Mica Diaphragm) cones are 15% lighter than previous types, thanks to the use of a low specific gravity material called PMP (Poly-Menthyl-Penten) that provides faster response (speed of sound rise and fall). Internal loss has been increased by 43%, lessening unwanted resonances to achieve the smooth frequency response that results in natural-sounding vocals. The proportion of base resin (powdered mica) and filler (talc) was determined by extensive listening tests, also in order to achieve natural vocals. The suspension (spider material and shape) was also re-designed for better bass response and wider dynamic range. Finally, the pearl white external appearance provides an impression of fresh, clean sound.

Aluminum Diecast Baskets (NS-525F Woofer and Midrange Driver)

Aluminum provides three to five times higher flexural strength than the usual metal or plastic types. In addition, the baskets are 43% thicker than conventional baskets with the same diameter. By increasing stiffness and suppressing unwanted resonance, detailed musical nuances can be more clearly heard. The baskets have also been designed with a wider aperture ratio to permit the air behind the cone to move freely. The are attached to cabinet at six points rather than four as in previous designs for a stronger connection.

NS-525F Advanced PMD Cone Woofer

Aluminum Dome Tweeter and DC-Diaphragm

1-1/8" Aluminum Dome Tweeters with DC Diaphragm™ and New Frame

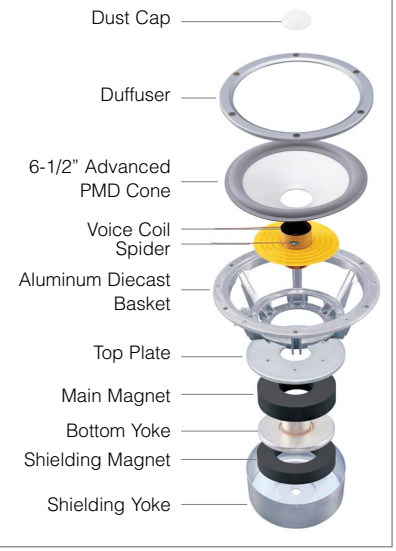
The high-performance tweeter features a dome made of an aluminum, with a DC Diaphragm that integrates the diaphragm and voice coil. The magnet is an new extra-powerful neodymium type. As a result, the tweeter is extremely light to minimize sound loss, yet is highly durable. It is capable of reproduction all the way up to 100kHz, which is exceptional performance for a 1-1/8" dome tweeter. Highs are crisp and clear even at high power levels.

The tweeter frame utilizes a new design that provides a better connection to the diaphragm edge to prevent frequency response degradation due to reflected waves. The aperture angle of the defuser has been increased for more natural transmission of the sound from the diaphragm. In addition, smaller size and higher stiffness result in better sound image localization and depth reproduction.

New Three-Way Design Concept with 6-1/2" Midrange and Woofer (NS-525F)

For transitioning smoothly and seamlessly to the high range and reproducing natural vocals, the diaphragms must have light weight and large internal loss. On the other hand, for high quality bass with a low minimum resonance frequency and high resolution, they must be heavy and have high stiffness. In order to balance these opposing requirements in a single speaker, Yamaha decided to make both midrange and woofer the same size: 6-1/2".

NS-525F Advanced PMD Woofer with Shielding Cover



• 6-1/2" Midrange Driver

To effectively take advantage of the light weight and large internal loss that are characteristic of the Advanced PMD material, a 0.35mm thick injection-molded cone was designed. It has a new curved shape that does not produce any peaks or dips to degrade the sound.

• 6-1/2" Woofer

The woofer's 1mm-thick injection-molded cone is a new design. The use of Advanced PMD allowed the cone wall to be thickened without changing its weight, achieving high stiffness. Straightening the cone shape also contributed to improved stiffness. However, even though the material is thicker, its large internal loss effectively restricts peaks and dips.

High-Performance Crossover Networks

The crossover networks use high-performance solen capacitors with extremely low loss characteristics, ensuring fast response.

Innovative Two Separate Chambers with Vertical and Slanted Partitions (NS-525F)

The cabinet has two separate chambers for the three drivers. The interior has vertical and slanted partitions to decrease standing waves. This construction also increases strength for less unwanted vibration and sound reproduction with a greater feeling of depth.

Three-Way Mitered Construction Cabinet with Chamfered Baffle

Yamaha speakers have employed 45° mitered-joint construction at the cabinet corners and baffle/body joints for many years. On the 525 A-PMD Series, mitered construction is also used for the back panel, improving the tightness of the joints so the entire cabinet behaves as a single body. This improves low frequency response and reduces unwanted vibration. In addition, the chamfered baffle acts to reduce sound diffraction.

Luxurious Real Wood Finish

All 525 A-PMD Series cabinets have surfaces of high quality wood and are given a luxurious and protective polyester coating.

Main Specifications	NS-525F	NS-M525	NS-C525
Recommended Usage	Front channels	Surround channels	Center channel
Type	3-way bass-reflex design	2-way bass-reflex design	2-way acoustic suspension design
Woofers	6-1/2" Advanced PMD cone	5" Advanced PMD cone	Dual 4" Advanced PMD cone
Midrange Driver	6-1/2" Advanced PMD cone		
Tweeter	1-1/8" Aluminum dome	1-1/8" Aluminum dome	1-1/8" Aluminum dome
DC-Diaphragm™	Yes	Yes	Yes
Magnetic Shielding	Yes	Yes	Yes
Real Wood Finish with Urethane/Polyester Finish	Yes	Yes	Yes
Gold-Plated Brass-Extruded Terminals	Yes	Yes	Yes
Frequency Response	35 Hz–50 kHz (-10 dB)	60 Hz–50 kHz (-10 dB)	57 Hz–50 kHz (-10 dB)
Sensitivity	89 dB/2.83 V/1 m	89 dB/2.83 V/1 m	89 dB/2.83 V/1 m
Input Power (Maximum/Nominal)	200 W/45 W	120 W/30 W	200 W/45 W
Crossover Frequencies	500 Hz/3 kHz	3 kHz	3 kHz
Impedance	6 ohms	6 ohms	6 ohms
Dimensions (W x H x D)	7-7/8" x 39-3/8" x 14-3/16"	6-15/16" x 12-11/16" x 7-9/16"	19-11/16" x 6-11/16" x 9-5/16"
Weight	50.1 lbs.	9.9 lbs.	16.3 lbs.